Canada-Manitoba

MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT

Annual Report

1986-1987

July 1987

Government of Canada Gouvernement du Canada
Government of Manitoba Gouvernement du Manitoba

MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT

IMPLEMENTATION COMMITTEE

1st Floor, Motherwell Building
1901 Victoria Avenue
Regina, Saskatchewan
S4P 3R4

1987 07 27

The Honourable Tom McMillan
Minister
Department of the Environment
Ottawa, Ontario
K1A OH3

The Honourable Leonard Harapiak
Minister
Department of Natural Resources
Winnipeg, Manitoba
R3C OV8

Dear Ministers:

I am pleased to present the fifth Annual Report of the Implementation Committee for the administration of the Manitoba Flood Protection Projects Agreement which was amended on May 22, 1985 to provide for flood protection works at Ste. Rose du Lac and the Souris Water Treatment Plant. This report covers the work undertaken during the period April 1, 1986 to March 31, 1987.

Activity in the fifth year of the agreement was reduced from the previous year with the completion of the dyke upgrading at Brunkild, Morris, St. Jean, Letellier and Rosenort, and the Morris central storage and communications building being completed. Dyke upgrading at Emerson continued.

During the reporting period total shareable expenditures were $639,827.24. Of this amount 45 percent or $287,922.26 was Canada's share and 55 percent or $351,904.98 was Manitoba's share.

Yours sincerely,

R. A. Halliday
Chairman

CANADA-MANITOBA

MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT

ANNUAL REPORT

FOR

THE PERIOD

APRIL 1, 1986 TO MARCH 31, 1987

Environment Canada
Inland Waters and Lands
Western and Northern Region
1901 Victoria Avenue
Regina, Saskatchewan
S4P 3R4

Province of Manitoba
Department of Natural Resources
Water Resources Branch
1577 Dublin Avenue
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June, 1987

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MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT

On March 10, 1983 the Government of Canada and Manitoba signed "An Agreement Respecting the Upgrading of Ring Dykes in Certain Communities in the Red River Valley". This Agreement provided for the upgrading of the existing dyking systems of eight communities in the Red River Valley to provide flood protection to the one percent flood level. The agreement was amended on May 22, 1985 to extend the time and provide for additional funding of $1.6 million to include flood protection works for Ste. Rose du Lac and the Souris Water Treatment Plant. The termination date for the amended Canada-Manitoba Flood Protection Projects Agreement is March 31, 1989.

1. Introduction

The fifth annual report reviews work activities and programs under the Canada-Manitoba Flood Protection Projects Agreement during the period from April 1, 1986 to March 31, 1987.

The Agreement provides up to $6.1 million to improve the existing ring dykes at Emerson, Letellier, Dominion City, St. Jean Baptiste, Morris, Rosenort, Brunkild, St. Adolphe, Ste. Rose du Lac and at the Souris Water Treatment Plant to protect against a one percent flood. The cost of the works undertaken under this agreement are shared 45 percent by Canada and 55 percent by Manitoba. Manitoba has instituted agreements with the municipalities in which the eight communities in the Red River Valley are located requiring a contribution of five percent of the capital costs to upgrade the dyking systems from the 1950 flood level to the one percent flood level and 25 percent of the annual maintenance costs. Thus in those instances where portions of the dyking systems are not up to the 1950 level

the capital cost of such portions will be shared 55 percent by Manitoba and 45 percent by Canada. In lieu of 25 percent of the annual maintenance costs the communities will be responsible for grass mowing as well as a fixed annual payment to the Province for pump replacement. Manitoba has signed agreements with the Turtle River Conservation District for the works at the Village of Ste. Rose du Lac and with the Town of Souris for contributions of five percent of the capital works and 25 percent of the annual maintenance costs.

The communities are shown on the location map in Appendix A. Location plans for the dyking systems are shown in Appendix B.

2. Organization

Under the terms of the Agreement an Implementation Committee was established consisting of one member appointed by the Minister of the Environment for Canada and one member appointed by the Minister of Natural Resources for Manitoba. The members for 1986-87 were:

Canada	Manitoba
Mr. R. A. Halliday Regional Director Inland Waters and Lands Environment Canada	Mr. N. Mudry Chief of Water Management Water Resources Branch Department of Natural Resources

Mr. Mudry acted as Chairman for the 1986-87 year and Mr. J. Toye of the Water Resources Branch, Manitoba Department of Natural Resources served as Secretary.

The Implementation Committee met on April 9, 1986, October 28, 1986 and February 12, 1987.

3. Progress

As stated previously the ten communities included in this Agreement are covered by cost-sharing agreements between the municipalities in which they are located and the Province of Manitoba. An amended agreement was sent to the R.M. of Ritchot as the municipality has requested that the dyking system north of the community be extended to provide protection to additional land. The Implementation Committee has agreed to this extension provided that the incremental costs are not included under the Canada-Manitoba Agreement. The Rural Municipality of Ritchot has agreed to be responsible for these additional costs but has not signed the amended agreement. The R.M. of Ritchot has not reached an agreement with the owner of the additional land to be protected.

The acquisition of right-of-way for the Ste. Rose du Lac flood protection scheme has met with some resistance. Because of the concerns expressed by landowners in the R.M. of Ste. Rose the Manitoba Minister of Natural Resources has called for a public Inquiry under the Expropriation Act. This public Inquiry is not expected to be held until June, 1987.

The following is the progress report on all the communities for the 1986-87 fiscal year.

Emerson - The southwest section of the Emerson dyke from the C.N.R. southerly to the U.S. border was completed under contract along with the West Lynne south dyke. Right-of-way was purchased for the dyke on the east side of town. Two low head standby pumps were purchased for the system. Included in the expenditures is the Town's share of the cost of the central storage and communications building at Morris. The United States Army Corps of Engineers have obtained authorization for the joint project of the Noyes Dyke and the dyke along the International Boundary under the 1986 Omnibus

Water Bill. The Corps will construct the International Boundary Dyke but the cost of the dyke will be cost shared by Canada and Manitoba under the Agreement.

Expenditures for the year were $177,281.96.

Letellier - The dykes were graded and seeded and portions of the dyke that are utilized as road surfaces were gravelled. The discharge chamber for the south pumping station was constructed. The electrical service to the southeast pumping station was upgraded and the emergency communications tower installed. Two Crisafulli standby pumps and one right angle gear drive assembly were purchased. Also included in the expenditures is Letellier's portion of the cost of the central storage and communications building constructed at Morris.

Expenditures for the year were $94,670.23.

St. Jean Baptiste - The dykes were graded and seeded and the road portions of the dyke were gravelled. The sewer service line under Railway Street at Centre Avenue was relocated and Railway Street was raised and gravelled. The emergency communications tower was installed. The electrical service to the five pumping stations was upgraded. Two Crisafulli standby pumps and two right angle gear drive assemblies were purchased. The bed for the planting of trees for erosion control was prepared. Also included in the expenditures is St. Jean's portion of the cost of the central storage and communications building constructed at Morris.

Expenditures for the year were $121,587.67.

Dominion City - Drainage improvements were undertaken by day labour along the south side of P.R. 201 on the south side of town.

Also included in the cost is Dominion City's portion of the cost of the central storage and communications building constructed at Morris.

Expenditures for the year were $33,453.92

Morris - Construction of the central storage supply and communications building was completed and Morris' portion of the cost included in the expenditures. The emergency communications tower and equipment was installed. Electrical service to four pumping stations was upgraded. Two Crisafulli standby pumps and two right angle drive gear assemblies were purchased. The bed for the planting of trees for erosion control were prepared.

Expenditures for the year were $95,119.13.

Rosenort - The clean up work and seeding of the dykes was completed. The work on the new south pumping station was completed and the electrical service to the north pumping station was upgraded. The emergency communications tower and equipment was installed. One Crisafulli standby pump was purchased. Also included in the expenditures is Rosenort's portion of the cost of the central storage and communications building constructed at Morris.

Expenditures for the year were $48,289.32.

Brunkild - The work on the new pumping station was completed and portions of the dyke also used as a road were gravelled. The emergency communications tower and equipment was installed. One Crisafulli standby pump was purchased. Also included in the expenditures is Brunkild's portion of the cost of the central storage and communications building constructed at Morris.

Expenditures for the year were $34,978.79.

St. Adolphe - No works were undertaken during the 1986-87 fiscal year because of the amended agreement not being signed by the R.M. of Ritchot. The only expenditures were for a standby pump and St. Adolphe's portion of the

cost of the central storage and communications building constructed at Morris.

Expenditures for the year were $21,328.18.

Ste. Rose du Lac - The only costs incurred to date are for land acquisition costs.

Expenditures for the year were $13,118.04.

Souris Water Treatment Plant Dyke - Design work was initiated but there were no expenditures for the year.

Total Expenditures - Expenditures for the 1986-87 fiscal year totalled $639,827.24. Table 1 indicates expenditures under the Agreement from 1982-87.

TABLE 1

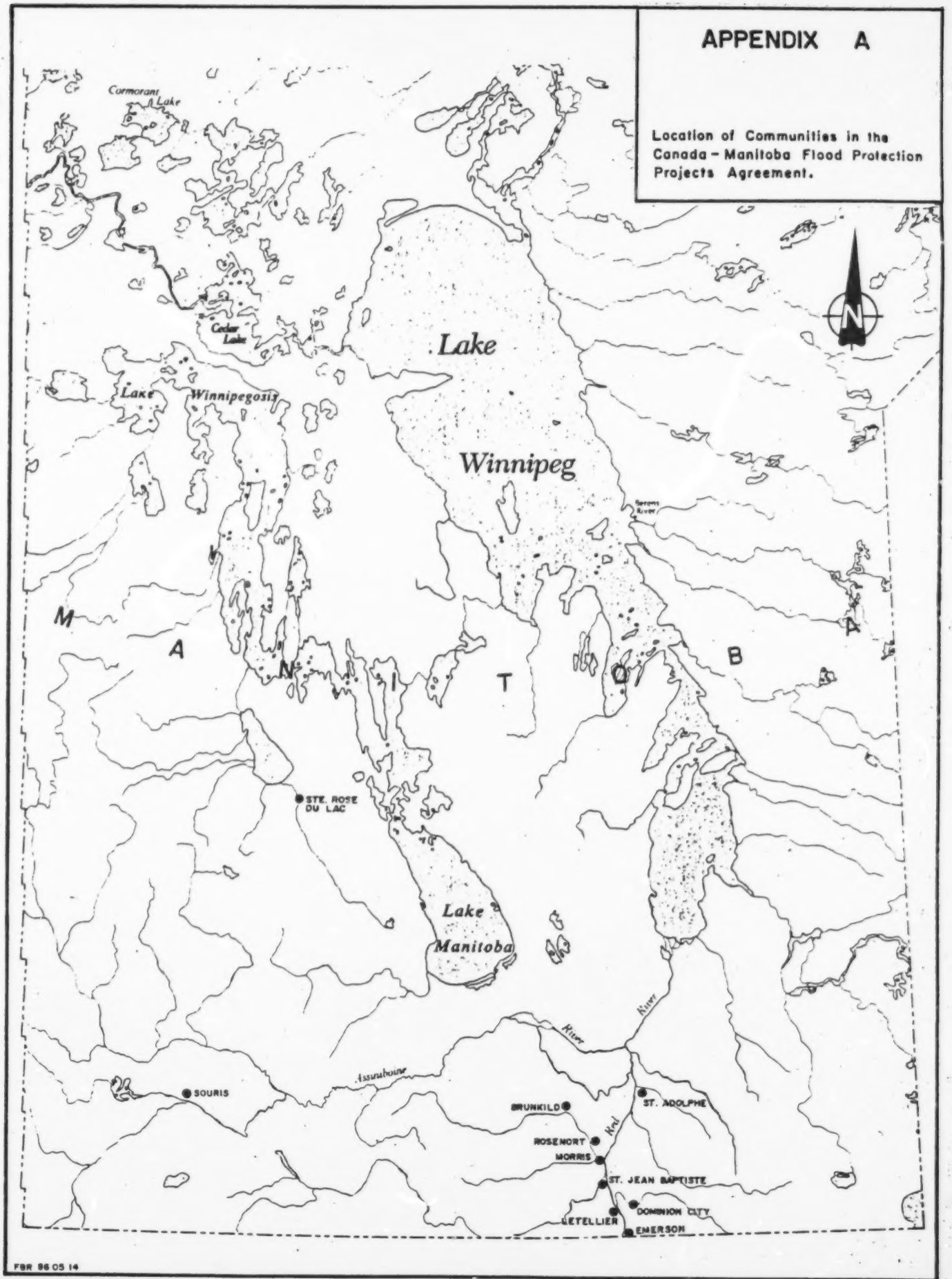
CANADA-MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT
EXPENDITURES FOR 1982-87

Community	1982/83*	1983/84	1984/85	1985/86	1986/87	Accumulative Total
Emerson	-	$ 3,834.76	$ 7,356.01	$ 114,675.92	$177,281.96	$ 303,148.65
Letellier	-	7,367.42	65,599.26	335,539.53	94,670.23	503,176.44
Dominion City	-	-	-	19,029.59	33,453.92	52,483.51
St. Jean Baptiste	$198,128.74	369.20	48,473.89	287,960.25	121,587.67	656,519.75
Morris	131,004.39	1,045.11	150,186.27	48,808.05	95,119.13	426,162.95
Rosenort	10,209.81	4,369.11	23,293.09	178,840.29	48,289.32	265,001.62
Brunkild	-	177,837.07	259,984.61	59,928.85	34,978.79	532,729.32
St. Adolphe	-	136,140.54	132,563.68	27,271.96	21,328.18	317,304.36
Ste. Rose du Lac	-	-	-	2,645.00	13,118.04	15,763.04
Souris	-	-	-	-	-	-
TOTAL	$339,342.84	$330,963.21	$687,456.81	$1,074,699.44	$639,827.24	$3,072,289.54

*During 1982-83 there were no funds expended because of the late signing of the agreement. The expenditures indicated are for those retroactive costs incurred by the Province prior to the agreement signing as allowed under clause 4(5) of the Agreement.

APPENDIX A

Location of Communities in the Canada – Manitoba Flood Protection Projects Agreement.



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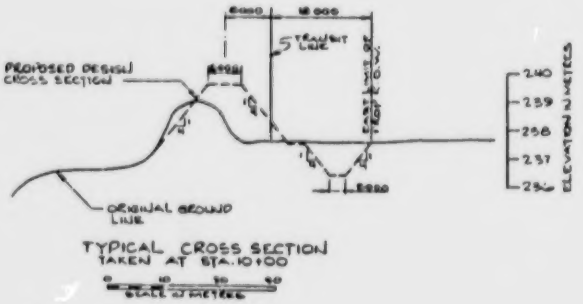

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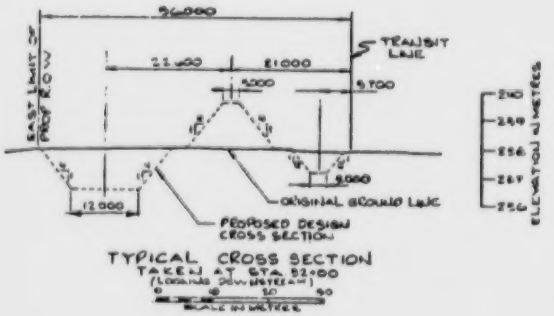

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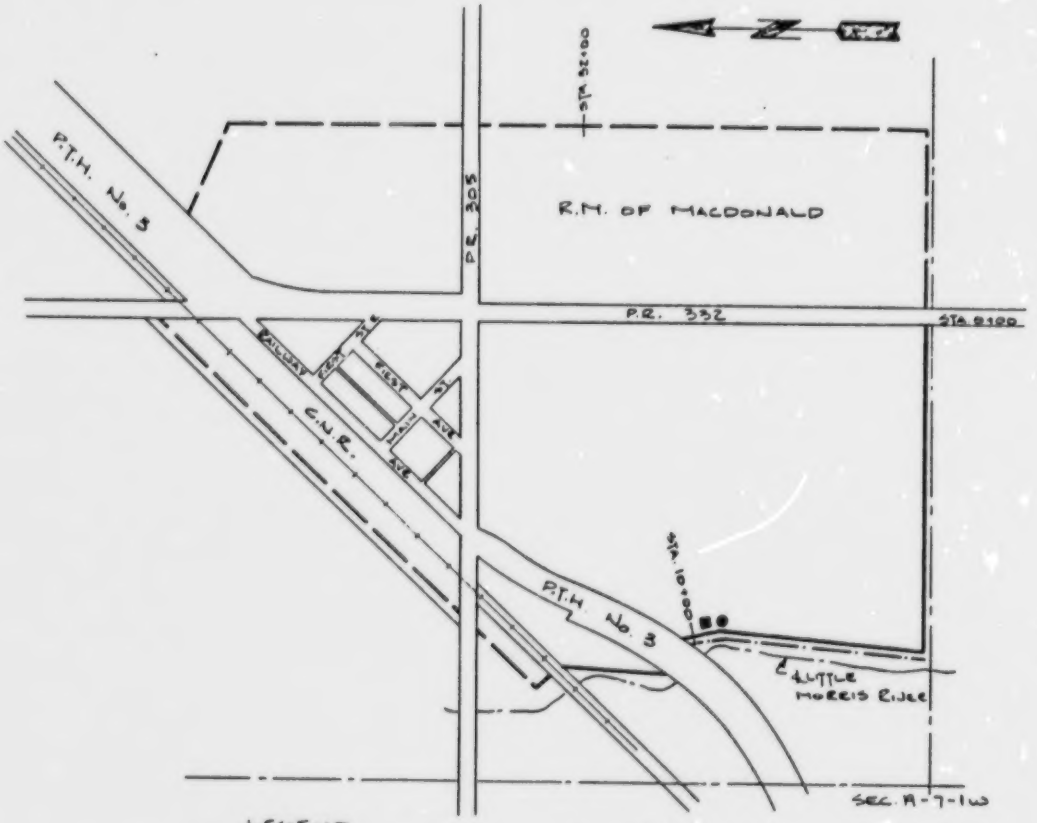


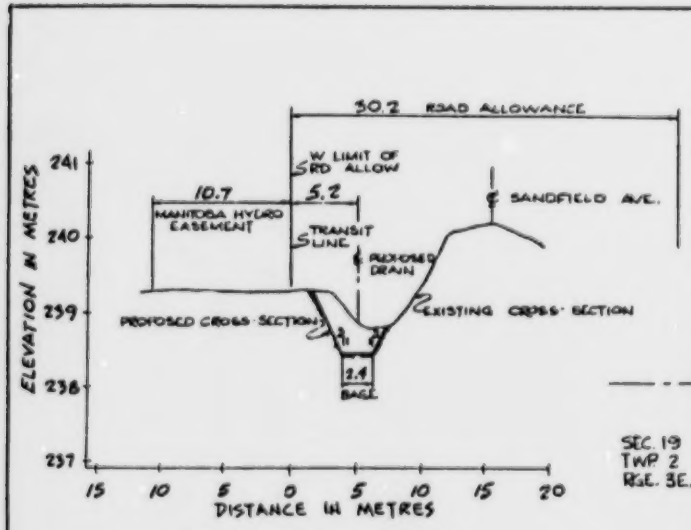
LEGEND

- LOCATION OF PROPOSED PERMANENT DYKING SYSTEM.
- PROPOSED PUMPING STATION.
- PROPOSED GRAVITY OUTLET CHAMBER.
- LOCATION OF PROPOSED GRAVEL SURFACE ROADWAY.
- LOCATION OF PROPOSED UPGRADING OF PERMANENT DYKING SYSTEM.

CANADA - MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT

PROVINCE OF MANITOBA
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES BRANCH

LOCATION PLAN AND TYPICAL CROSS SECTIONS FOR VILLAGE OF BRUNKILD



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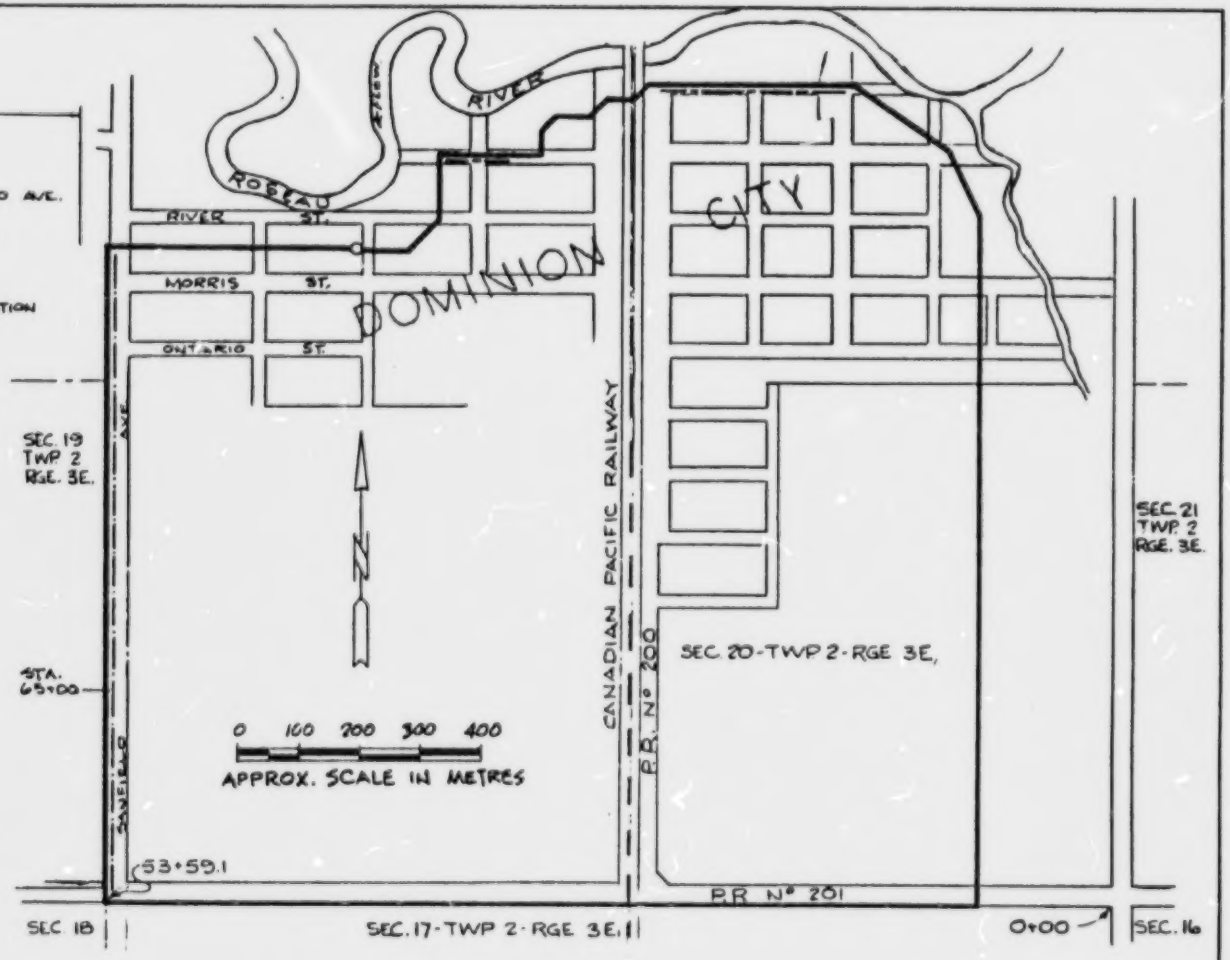


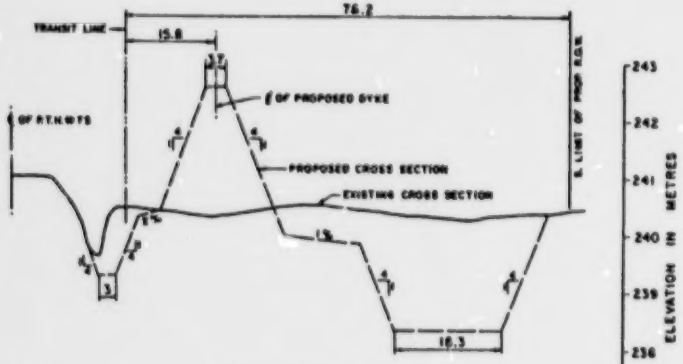
LEGEND

- LOCATION OF PROPOSED UPGRADING OF PERMANENT DYKING SYSTEM.
- EXISTING DYKE REQUIRING NO IMPROVEMENTS
- O EXISTING GRAVITY OUTLET CHAMBER
- LOCATION OF PROPOSED GRAVEL SURFACE ROADWAY.
- LOCATION OF PROPOSED PAVED SURFACE ROADWAY.

PROVINCE OF MANITOBA
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES BRANCH

CANADA - MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT

LOCATION PLAN AND TYPICAL CROSS SECTIONS FOR VILLAGE OF DOMINION CITY



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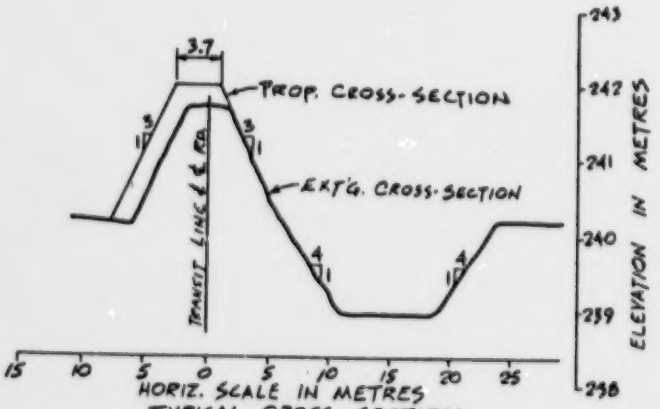

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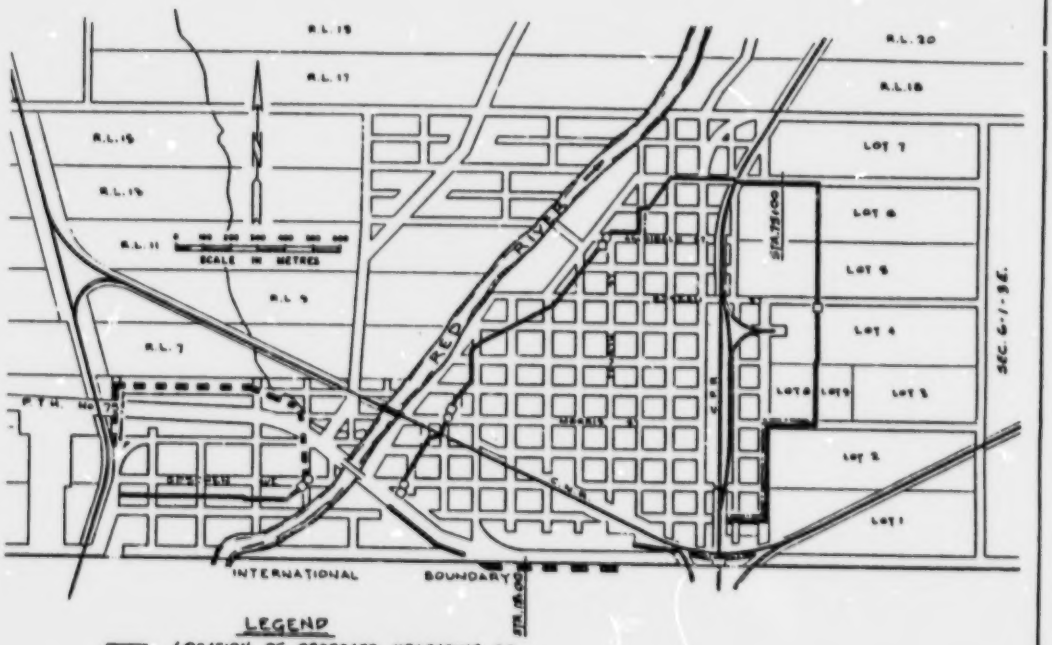


LEGEND

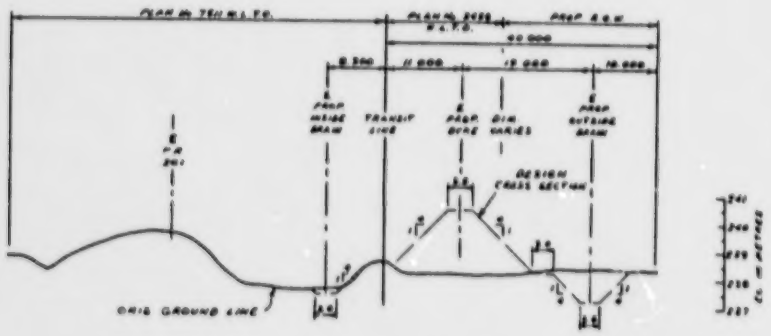
- LOCATION OF PROPOSED UPGRADING OF PERMANENT DYKING SYSTEM.
- LOCATION OF PROPOSED NEW DYKES
- EXISTING PUMPING STATION
- EXISTING GRAVITY OUTLET CHAMBER
- LOCATION OF PROPOSED GRAVEL SURFACE ROADWAY.

CANADA - MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT

PROVINCE OF MANITOBA
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES BRANCH

LOCATION PLAN AND TYPICAL CROSS SECTIONS FOR TOWN OF EMERSON

DATE 81 11 27



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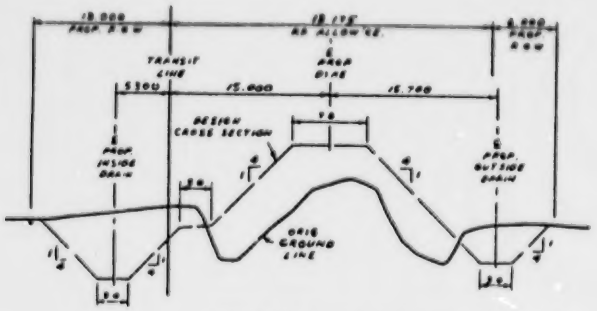


CROSS SECTION AT STA 16+00

SEC. 30-2-2E.

R.L. No. 137

SEC. 19-2-2E.

136

135

PROPOSED DYKE

133

¼ SEC. LINE

SEC. 20-2-2E.

R.L. 132

SOUTH MILLS

131

FIRST ST. EAST

C.N.R.

FOURTH ST.

THIRD AVE. E.

130

RESERVOIR

2nd AVE.

2nd STE.

PTH. No. 75

RE-LOCATE EXISTING PUMPING STATION

P.R. 201

MARAIS

129

STA. 0+00

AUX

SEC. 18-2-2E.

R.M. OF MONTCALM

SEC. 17-2-2E.

0 100 200 300

SCALE IN METRES

LEGEND

- LOCATION OF PROPOSED UPGRADING OF PERMANENT DYKING SYSTEM.
- LOCATION OF PROPOSED NEW DYKING.
- EXISTING PUMPING STATION.
- RE-LOCATED PUMPING STATION.
- PROPOSED GRAVITY OUTLET CHAMBER
- LOCATION OF PROPOSED GRAVEL SURFACE ROADWAY.

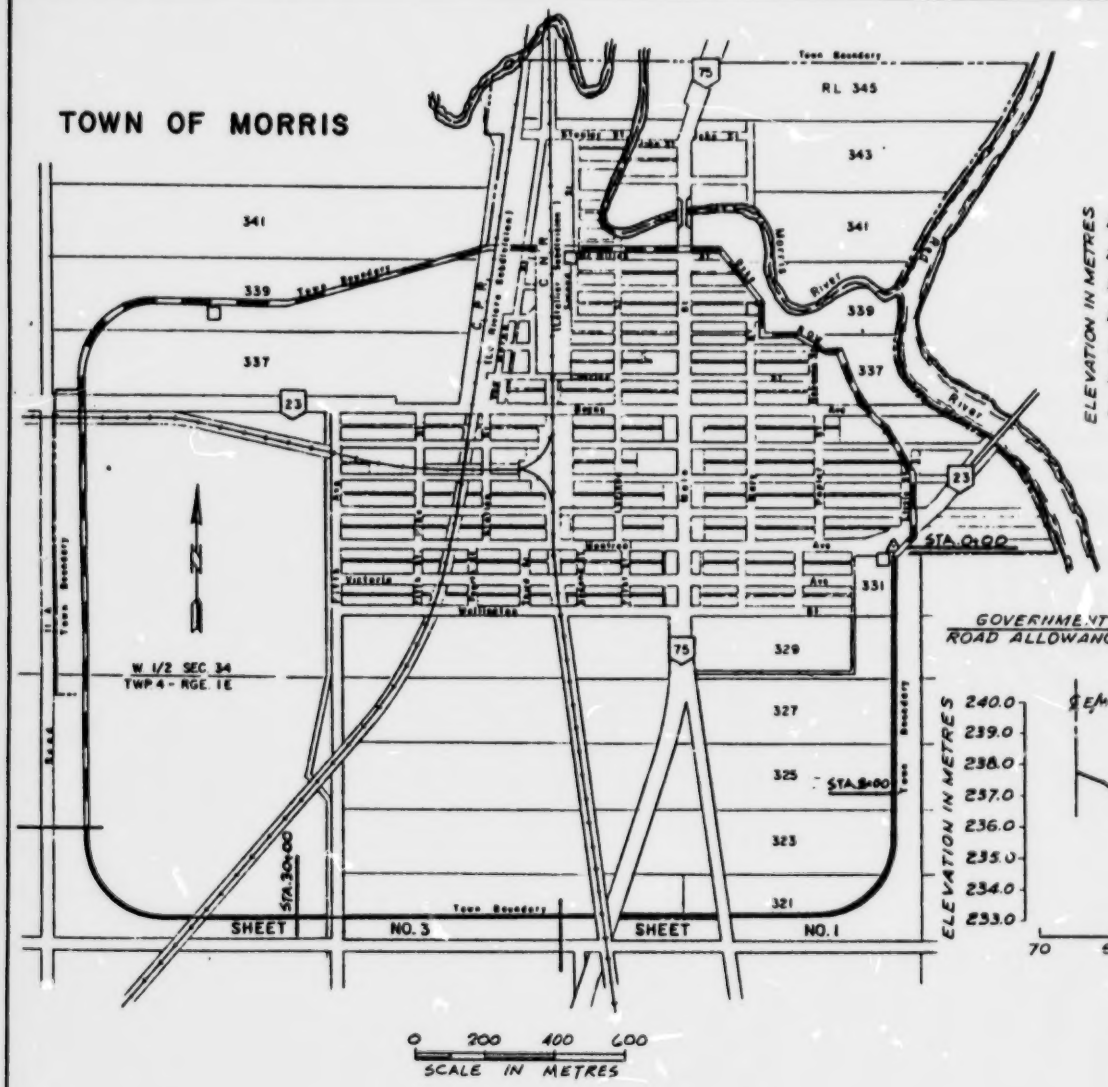
PROVINCE OF MANITOBA
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES BRANCH

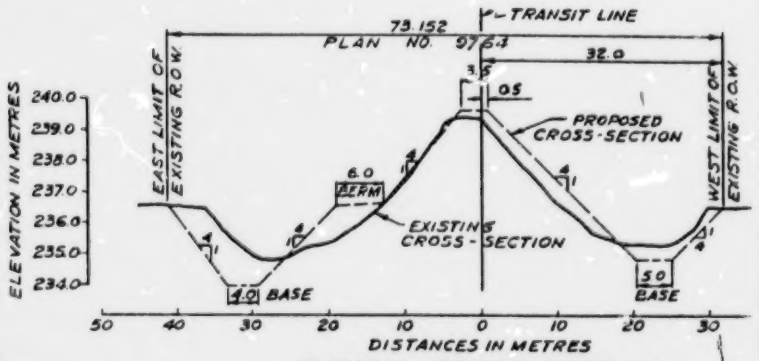
PREPARED | DRAWN F.R. CHECKED | SUBMITTED | APPROVED H. Chudley

CANADA - MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT

LOCATION PLAN AND TYPICAL CROSS SECTIONS FOR VILLAGE OF LETELLIER

SCALE | DATE | SHEET | FILE NO.





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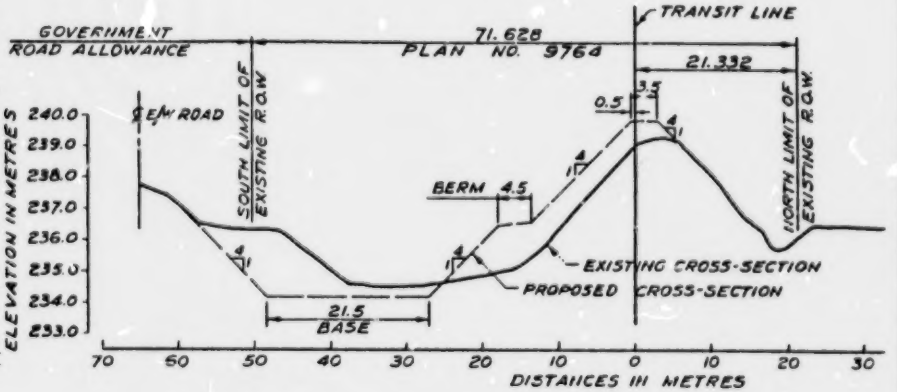


TYPICAL CROSS-SECTION

(TAKEN AT STA 30+00)

LEGEND

- LOCATION OF PROPOSED UPGRADING OF PERMANENT DYKING SYSTEM
- EXISTING DYKES NOT REQUIRING IMPROVEMENT
- EXISTING PUMPING STATION

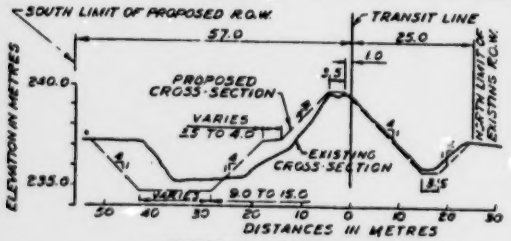
PROVINCE OF MANITOBA
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES BRANCH

PREPARED | DRAWN F.R. | CHECKED | SUBMITTED | APPROVED

CANADA - MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT

LOCATION PLAN AND TYPICAL CROSS SECTIONS FOR TOWN OF MORRIS

SCALE AS SHOWN | DATE | SHEET | FILE NO.



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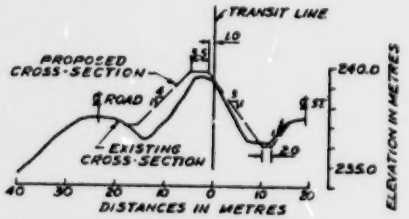

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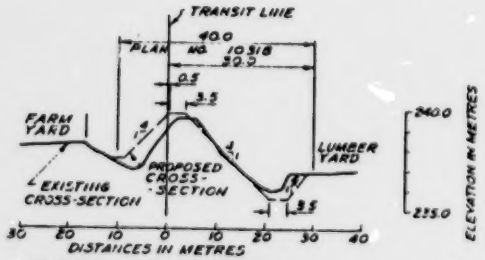

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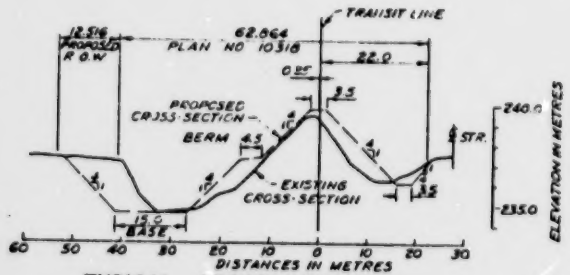

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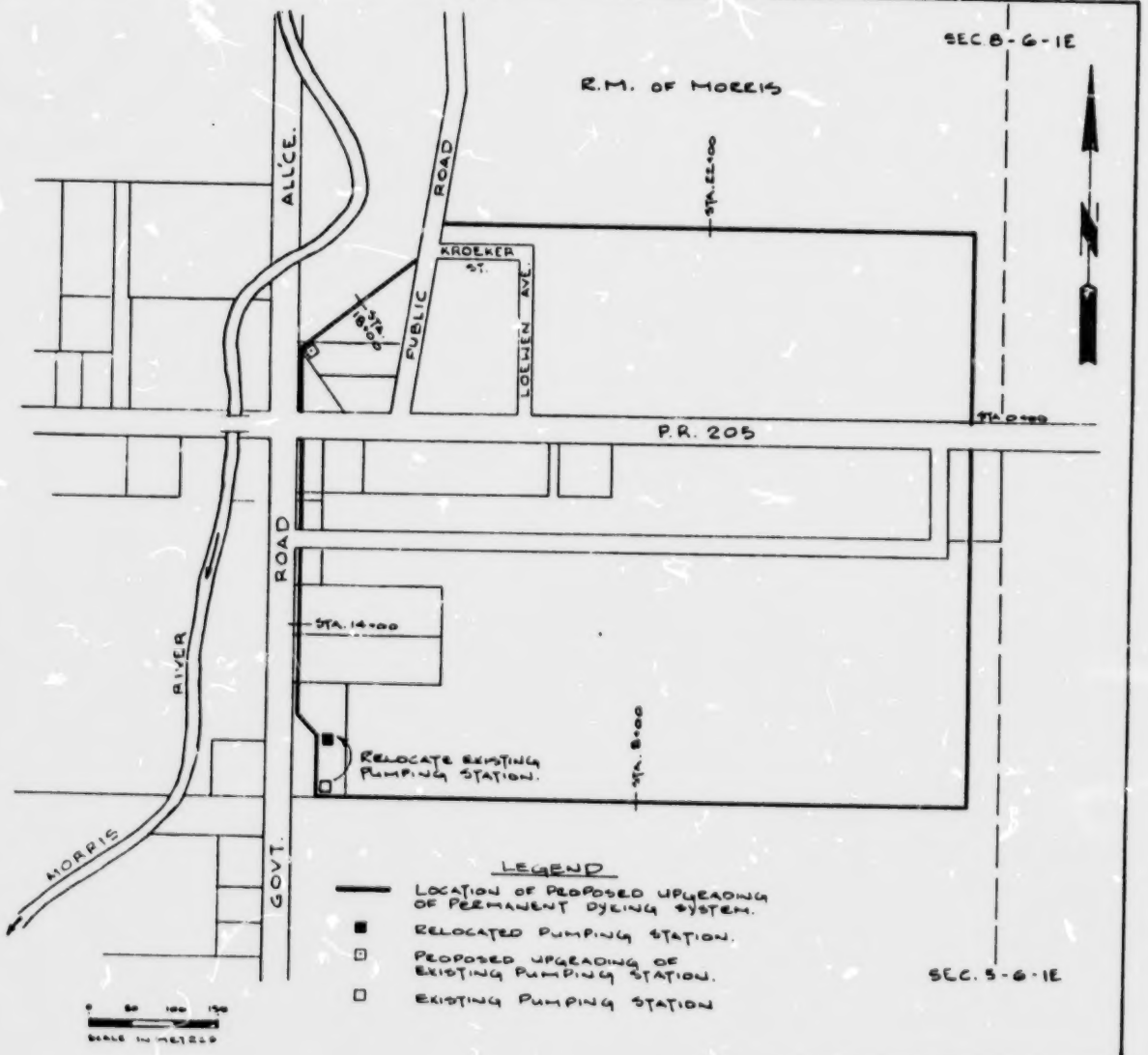
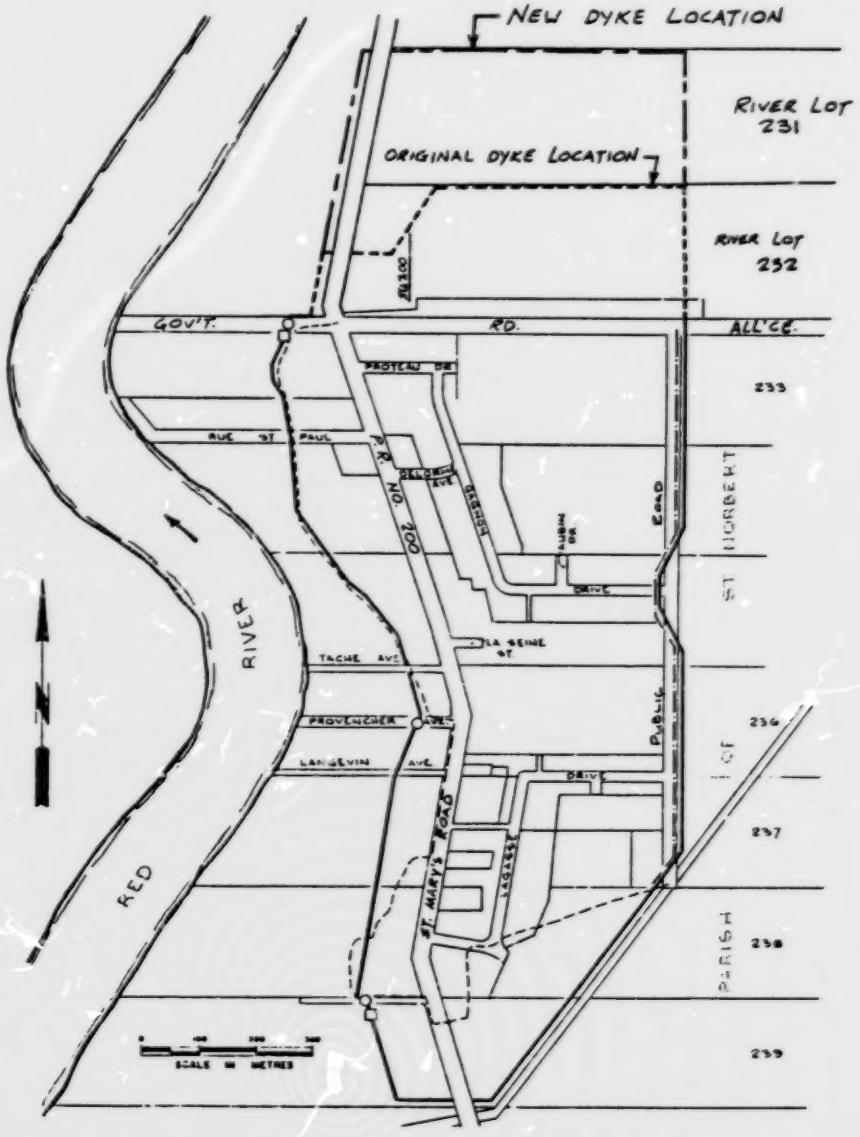
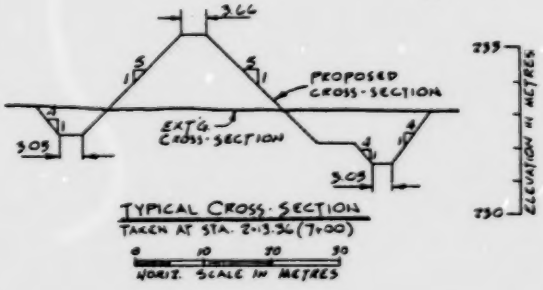


CANADA - MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT

PROVINCE OF MANITOBA
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES BRANCH

LOCATION PLAN AND TYPICAL CROSS SECTIONS FOR VILLAGE OF ROSENORT





TYPICAL CROSS-SECTION
TAKEN AT STA. 2+13.36 (7+00)

LEGEND

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- LOCATION OF PROPOSED WELD DYKE.
- EXISTING PUMPING STATION.
- EXISTING GRAVITY OUTLET CHAMBER.
- LOCATION OF PROPOSED GRAVEL SURFACE ROADWAY.

CANADA - MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT

DRAWN F.B.R.
CHECKED
PREPARED

Manitoba Natural Resources
Water Resources

SUBMITTED
APPROVED

LOCATION PLAN AND TYPICAL CROSS SECTION FOR VILLAGE OF ST. ADOLPHE

SCALE	DATE	SHEET	FILE NO.
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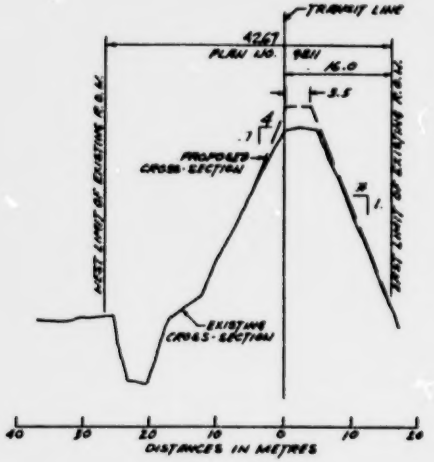

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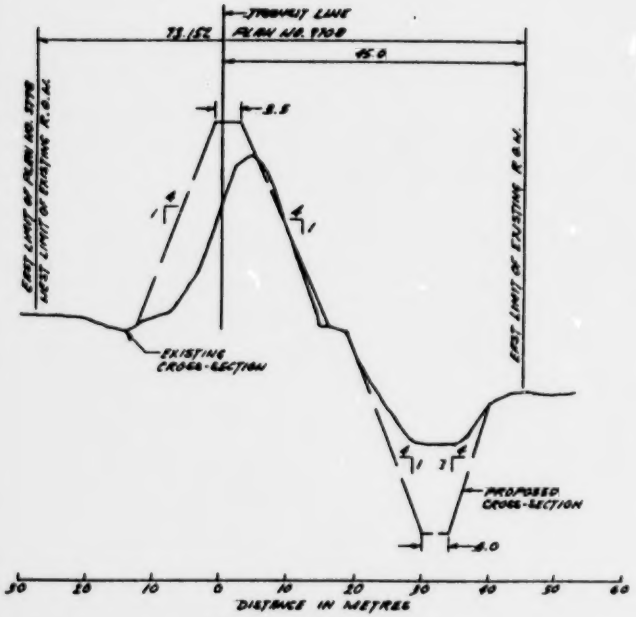
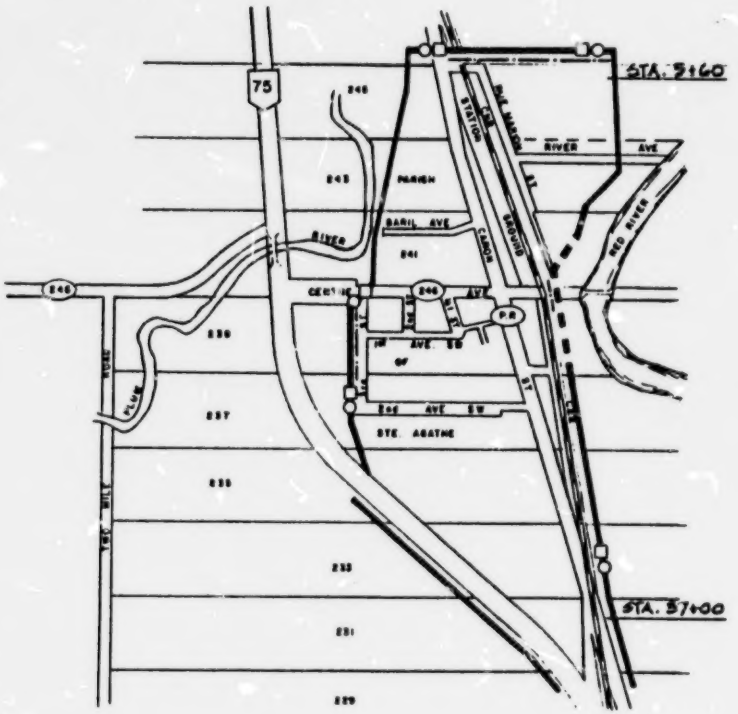


TYPICAL CROSS-SECTION

TAKEN AT STA. 37+00

ELEVATION IN METRES

240 239 238 237 236 235 234 233



LEGEND

- LOCATION OF PROPOSED UPGRADING OF PERMANENT DYKE SYSTEM.
- LOCATION OF PROPOSED NEW DYKE
- EXISTING PUMPING STATION
- EXISTING GRAVITY OUTLET CHAMBER
- LOCATION OF PROPOSED GRAVEL SURFACE ROADWAY.

CANADA - MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT

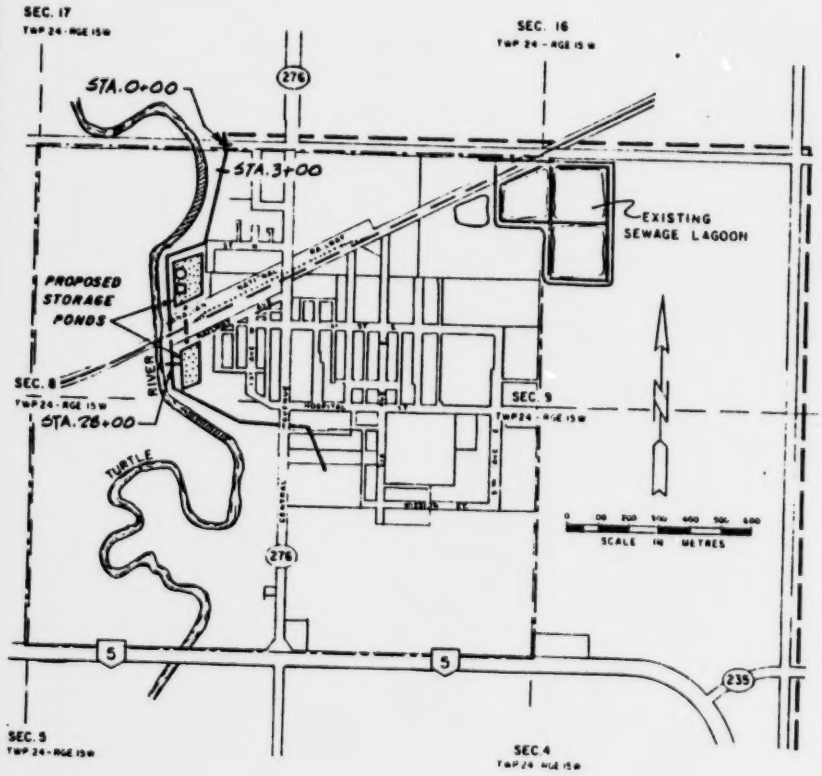
PROVINCE OF MANITOBA
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES BRANCH

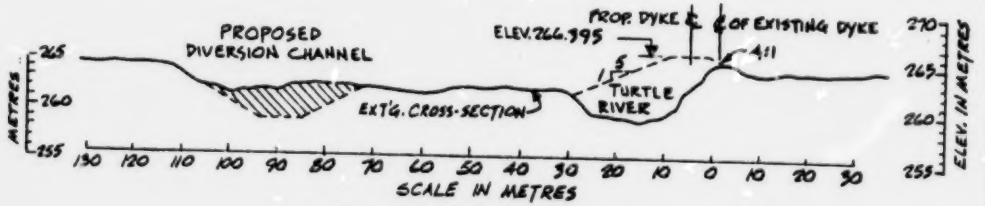
PREPARED FR CHECKED SUBMITTED APPROVED

LOCATION PLAN AND TYPICAL CROSS SECTIONS FOR VILLAGE OF ST. JEAN BAPTISTE

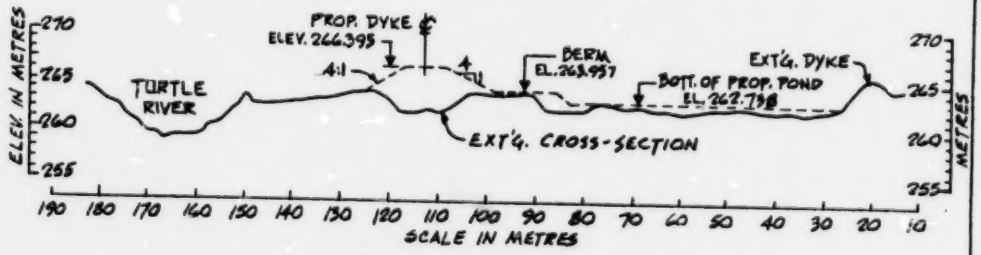
SCALE AS SHOWN DATE SHEET OF FILE NO

VILLAGE OF
STE. ROSE DU LAC





TYPICAL CROSS-SECTION
(TAKEN AT STA. 3+00)



TYPICAL CROSS-SECTION
(TAKEN AT STA. 28+00)

LEGEND

——— - LOCATION OF PROPOSED UPGRADING OF PERMANENT DYKING SYSTEM
– – – - LOCATION OF PROPOSED NEW DYKE
□ - PROPOSED PUMPING STATION
○ - PROPOSED GRAVITY OUTLET CHAMBER

PROVINCE OF MANITOBA
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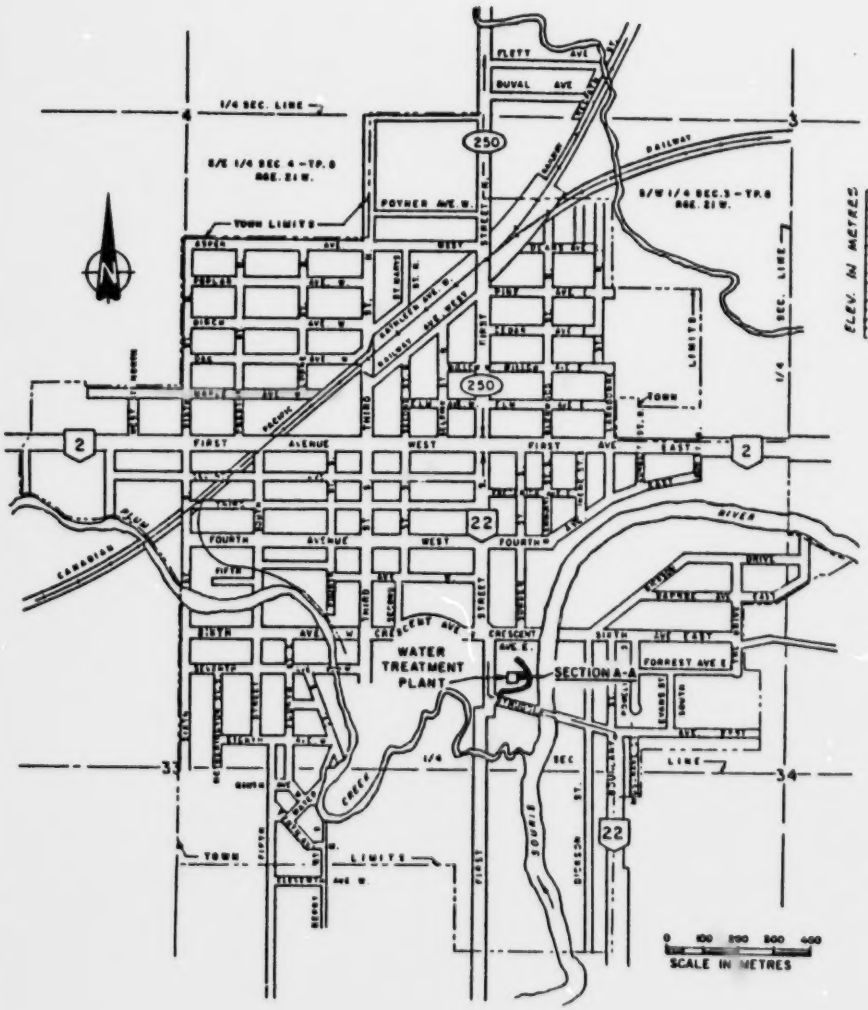
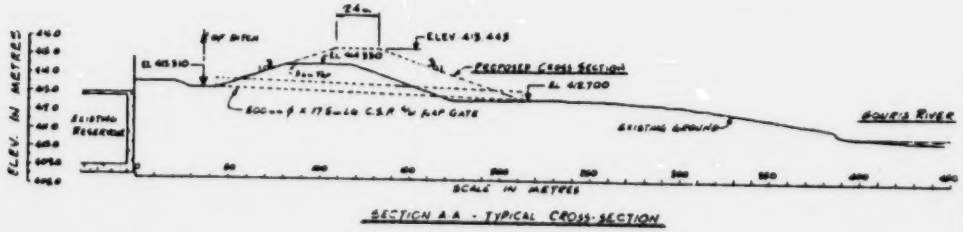
CANADA - MANITOBA FLOOD PROTECTION
PROJECTS AGREEMENT

LOCATION PLAN
AND
TYPICAL CROSS SECTIONS
FOR
VILLAGE OF STE. ROSE DU LAC





SECTION A-A - TYPICAL CROSS-SECTION

LEGEND

——— - LOCATION OF PROPOSED UPGRADING OF EXISTING DYKE

PROVINCE OF MANITOBA
DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES BRANCH

CANADA - MANITOBA FLOOD PROTECTION PROJECTS AGREEMENT

LOCATION PLAN AND TYPICAL CROSS SECTIONS FOR TOWN OF SOURIS